

Lesson 2.1 continued

Learning Activity

1. 4 inches; 4 inches 2. $AB = 2AC$
3. *Sample answer:* Continually bisecting one inch is convenient and measurable. Doing this creates increments of 2, 4, 8, and 16.

Lesson 2.2

Warm-Up Exercises

1. $m\angle A = 116^\circ$ 2. $m\angle B = 65^\circ$
3. $m\angle C = 52^\circ$ 4. $x = 9$ 5. $x = 15$

Daily Homework Quiz

1. $GH = 27.5$, $FH = 55$ 2. $x = 5$ 3. $M(0, 2)$
4. 1.7 miles

Practice A

1. $\angle ABC$; \overrightarrow{BD} 2. twice 3. 23° 4. 70°
5. 45° 6. $m\angle CBA = 35^\circ$; $m\angle DBC = 70^\circ$
7. $m\angle CBA = 75^\circ$; $m\angle DBC = 150^\circ$
8. $m\angle CBA = 45^\circ$; $m\angle DBC = 90^\circ$ 9. $x = 30$
10. $x = 20$ 11. $x = 3$ 12. false 13. true
14. true 15. false 16. 36°

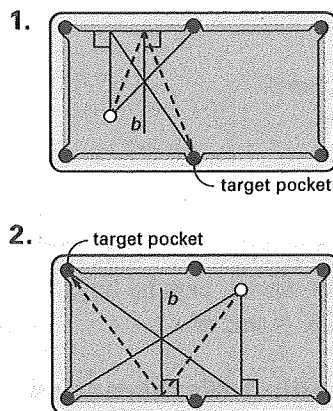
Practice B

1. 65° 2. 10° 3. 74.5°
4. $m\angle EFJ = 45^\circ$; $m\angle JFG = 45^\circ$
5. $m\angle EFJ = 67.5^\circ$; $m\angle JFG = 67.5^\circ$
6. $m\angle EFJ = 16^\circ$; $m\angle JFG = 16^\circ$
7. $x = 25$ 8. $x = 5$ 9. $x = 23$ 10. \overrightarrow{JM}
11. $KJM = MJL$ or $MJK = LJM$ 12. KJM or MJK 13. 92 14. $m\angle 1 = 58.5^\circ$; $m\angle 2 = 58.5^\circ$

Reteaching with Practice

1. $m\angle APS = 65^\circ$, $m\angle SPB = 65^\circ$
2. $m\angle CPS = 51^\circ$, $m\angle DPS = 51^\circ$
3. $m\angle EPS = 90^\circ$, $m\angle SPF = 90^\circ$
4. $m\angle GPS = 75^\circ$, $m\angle HPS = 75^\circ$
5. $m\angle CBD = 75^\circ$, $m\angle ABC = 150^\circ$; obtuse
6. $m\angle CBD = 90^\circ$, $m\angle ABC = 180^\circ$; straight
7. $x = 55$ 8. $x = 25$ 9. $x = 12.5$

Real-Life Application



Lesson 2.3

Warm-Up Exercises

1. $\angle DBE$ or $\angle EBC$ 2. $\angle DBA$ or $\angle DBC$
3. $\angle ABE$ 4. $\angle ABC$

Daily Homework Quiz

1. $m\angle ABD = m\angle DBC = 77^\circ$
2. $m\angle GHL = 64^\circ$, $m\angle GHJ = 128^\circ$; obtuse
3. $x = 7$ 4. $y = 10$

Practice A

1. False; two angles are complementary if the sum of their measures is 90° . Or, two angles are supplementary if the sum of their measures is 180° .
2. true 3. False; two angles are adjacent angles if they share a common vertex and a common side, but have no common interior points.
4. true 5. complementary
6. supplementary 7. neither 8. 58° 9. 75°
10. 13° 11. 20° 12. 90° 13. 162° 14. $\angle 2$
15. $\angle 2$ 16. $\angle 1$, $\angle 3$ 17. 60°

Practice B

1. 90 2. 180 3. adjacent 4. theorem
5. Supplementary; nonadjacent 6. Neither; adjacent 7. Neither; nonadjacent 8. 50°
9. 78° 10. 26° 11. 5° 12. 126° 13. 65°
14. 158° 15. 90° 16. $x = 30$ 17. $x = 10$
18. $x = 20$ 19. $\angle 1$; $\angle 1$ and $\angle 3$ are congruent by the Congruent Complements Theorem.
20. $x = 106^\circ$ 21. 16°